

Fig. 1. Melanotic tumour in the butt region of the goat skin.

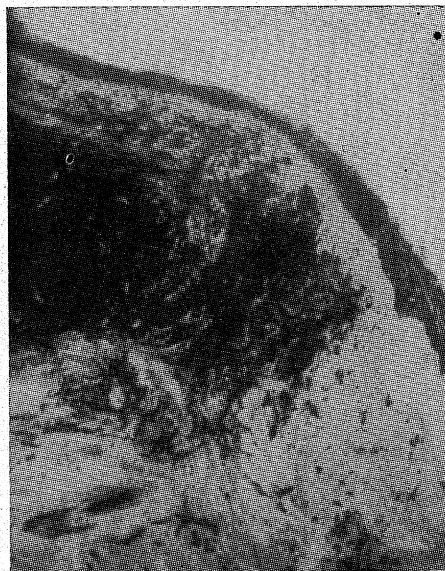


Fig. 2. Melanin pigment granules in the cut section of the goat skin, stained by Masson Fontana method.

regions are not of much significance, but those occurring on the main body of the skins devalue them because of the formation of holes during beam-house operations.

Venkatesan *et al.* (1977) on the basis of 1-year survey observed that the incidence of melanoma on the goat skin is insignificant (0.03% as ascertained on the basis of the total defective skins), although Damodaran and Parthasarathy (1972) reported melanoma and papilloma to be more frequent amongst goat. No melanotic tumour of skin was recorded amongst 37,026 skins of sheep examined for various surface defects, although the sheep and goat skins have common sites for various other tumours—to the tune of 85.7% (Damodaran and Parthasarathy, 1972). Contrary to the above statement, Head (1953) observed that the number of tumours on sheep skin and subcutaneous tissue may be small and that they must become large in size before they become visible through the fleece. The types of neoplasms of sheep skins encountered by

Head (1953) were fibropapillomas, squamous cell carcinoma, fibroma and lymphosarcoma with dermal and subcutaneous involvement. Similarly, 2 cases of squamous cell carcinoma among Merino sheep skin were reported by Damodaran *et al.* (1976 b).

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A note on the incidence of melanoma on goat skin

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Melanoma is known to affect the quality of goat skin. Its incidence in goat skins is reported in this paper.

In a general survey of goats for various surface defects, 37,026 skins of sheep and 23,429 skins of goat were examined during April 1976 to March 1977 at Perambur Slaughterhouse, Madras. Two black hairy goat skins (non-descript) revealed melanoma on the butt (Fig. 1) and kidney regions, the valuable portions from the viewpoint of leather manufacture.

Melanotic tumour in the first instance (Fig. 1) was multiple (0.5 to 2.5 cm in diameter) and solitary in the second instance (1 cm in diameter) in gross appearance. They appeared pale, raised, circumscribed and cauliflower-like in growth. Unstained section through the tumour showed dark blackish areas more closer to the epidermis and spreading on

to the dermis.

Stained sections (Bancroft, 1967) through the melanotic tissue showed that melanin pigment granules were polyhedral (Fig. 2) and black.

A variety of neoplasms occurring in different locations of sheep and goat have been recorded (Arora and Iyer, 1969; Dwivedi, 1969; Paikne, 1970). Damodaran *et al.* (1976 a) recorded melanoma on the skin and occasionally on uncommon sites such as the ocular melanoma in a cow. Higher incidence of melanotic tumours was also reported in Angora goat (Thomas, 1929) in South Africa.

Damodaran and Parthasarathy (1972) reported the overall percentage of incidence of neoplasms in sheep and goat to be much lower than in other species of animals. Three melanotic tumours were recorded at the Veterinary College, Madras, in goat skin on 3 different locations, viz. one each on right and left hind coronets and third on the udder. For the leather industry tumours in such

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